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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,801	01/16/2004	Hongwen Li	006353/P1/DSM/LOW K	8276
41161	7590	01/25/2006	EXAMINER	
DUGAN & DUGAN, PC 55 SOUTH BROADWAY TARRYTOWN, NY 10591			ZERVIGON, RUDY	
			ART UNIT	PAPER NUMBER

1763

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/759,801		LI ET AL.	
	Examiner		Art Unit	
	Rudy Zervigon		1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>All</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Fairbairn, Kevin P. et al. (US 20020155629 A1). Fairbairn teaches a system (Figure 3, 9C) configured to pattern a substrate comprising: a lithography subsystem (902; Figure 9C, [0069]) configured to form a patterned masking layer on the substrate; an etch subsystem (902; Figure 9C, [0069]) configured to receive the substrate after the patterned masking layer has been formed thereon and to etch the substrate to form one or more etched features on the substrate, the etch subsystem (902; Figure 9C, [0069]) having an integrated inspection system (Figure 3, [0037]) configured to inspect the substrate; and a controller (320, 330, 340; Figure 3, [0037]) coupled to the lithography subsystem (902; Figure 9C, [0069]) and the etch subsystem (902; Figure 9C, [0069]), the controller (320, 330, 340; Figure 3, [0037]) having computer program code (Figure 4a-b) configured to communicate with each subsystem (901-904, 909; Figure 3, 9C) and to perform the steps of: receiving information about the substrate (360, 310; Figure 3) from the integrated inspection system (Figure 3, [0037]) of the etch subsystem (902; Figure 9C, [0069]); and adjusting a stepper focus ([0031], [0032], [0035]) of the lithography subsystem (902; Figure 9C, [0069]) during formation of a subsequent patterned masking layer based at least in part on

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the information received from the etch subsystem (902; Figure 9C, [0069]), as claimed by claim

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Fairbairn further teaches a system (Figure 3, 9C) configured to pattern a substrate comprising: a low K dielectric deposition subsystem (901-904, 909; Figure 3, 9C) configured to deposit one or more low K dielectric layers on the substrate, the low K dielectric deposition subsystem (901-904, 909; Figure 3, 9C) having an integrated inspection system (Figure 3, [0037]) configured to inspect the substrate; an etch subsystem (902; Figure 9C, [0069]) configured to receive the substrate after one or more low K dielectric layers have been deposited on the substrate and to etch the substrate to form one or more etched features in the one or more low K dielectric layers formed on the substrate, the etch subsystem (902; Figure 9C, [0069]) having an integrated inspection system (Figure 3, [0037]) configured to inspect the substrate; and a controller (320, 330, 340; Figure 3, [0037]) coupled to the low K dielectric deposition subsystem (901-904, 909; Figure 3, 9C) and the etch subsystem (902; Figure 9C, [0069]), the controller (320, 330, 340; Figure 3, [0037]) having computer program code (Figure 4a-b) configured to communicate with each subsystem (901-904, 909; Figure 3, 9C) and to perform the steps of: receiving information about the substrate from the integrated inspection system (Figure 3, [0037]) of the low K dielectric deposition subsystem (901-904, 909; Figure 3, 9C); determining an etch process to perform within the etch subsystem (902; Figure 9C, [0069]) based at least in part on the information received from the inspection system (Figure 3, 9C) of the low K dielectric deposition subsystem (901-904, 909; Figure 3, 9C); directing the etch subsystem (902; Figure 9C, [0069]) to etch at least one low K dielectric layer on the substrate based on the etch process; receiving information about the substrate from the integrated inspection system (Figure 3,

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[0037]) of the etch subsystem (902; Figure 9C, [0069]); and adjusting etching of the substrate in real-time based on the information received from the etch subsystem (902; Figure 9C, [0069]), as claimed by claim 2 – Applicant’s “low K dielectric” claim requirements is are claim requirements of intended use. Further, it has been held that claim language that simply specifies an intended use or field of use for the invention generally will not limit the scope of a claim (Walter , 618 F.2d at 769, 205 USPQ at 409; MPEP 2106). Additionally, in apparatus claims, intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim (In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto , 136 USPQ 458, 459 (CCPA 1963); MPEP2111.02).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6960416 B2

US 6863733 B1

US 6698944 B2

US 6099598 A

US 6027842 A

US 6004706 A

US 5820679 A

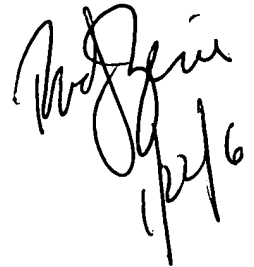
US 5628828 A

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US 5413664 A

US 5310410 A

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Rudy Zervigon whose telephone number is (571) 272.1442. The examiner can normally be reached on a Monday through Thursday schedule from 8am through 7pm. The official fax phone number for the 1763 art unit is (703) 872-9306. Any Inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Chemical and Materials Engineering art unit receptionist at (571) 272-1700. If the examiner can not be reached please contact the examiner's supervisor, Parviz Hassanzadeh, at (571) 272-1435.

A handwritten signature in black ink, appearing to read 'Rudy Zervigon', with the date '1/2/6' written below it.